AMENDMENTS TO THE CLAIMS:

Complete Listing of Claims

- 1 1. (original) A handheld computing device comprising:
- 2 a screen capable of displaying mathematical expressions;
- a key panel having keys operating the calculator and entering user
 responses;
- a processor for executing programming that provides a user interface to assist the user in learning to solve a mathematical symbolic calculation problem,
- and expert programming which provides a set of transformations for a mathematical object that the user can choose from and apply to the
- 9 mathematical object to produce the next step in a solution to the problem.
- 2. (original) The handheld computing device of Claim 1, wherein said processor
- 2 is further programmed to allow transformations of the mathematical object that
- 3 are valid mathematically but do not lead to the solution of the problem.
- 1 3. (original) The handheld computing device of Claim 2, wherein said processor
- 2 is further programmed to pause after the user selects the transformation before
- 3 applying the transformation to the problem.
- 4. (original) The handheld computing device of Claim 3, wherein said processor
- 2 is further programmed to clean-up the result of a previous transformation in
- 3 response to the user pressing a key, where clean-up consists of arithmetic and
- 4 other basic simplification appropriate for the problem.

- 5. (original) The handheld computing device of Claim 1, wherein said processor
- 2 is further programmed to clean-up the result of a previous transformation in
- 3 response to the user pressing a key, where clean-up consists of arithmetic and
- 4 other basic simplification appropriate for the problem.
- 1 6. (original) The handheld computing device of Claim 1, wherein said processor
- 2 is further programmed to provide a set transformation tools for a mathematical
- 3 sub-object that the user can choose from and apply to the mathematical sub-
- 4 object in a selection box to produce the next step in a solution to the problem.
- 1 7. (original) A graphing calculator comprising:
- 2 a screen capable of displaying mathematical expressions;
- a key panel having keys operating the calculator and entering user
- 4 responses;
- 5 a processor for executing programming that provides a user interface to
- 6 assist the user in learning to solve a mathematical symbolic calculation problem,
- 7 and expert programming which provides a set of transformations for a
- 8 mathematical object that the user can choose from and apply to the
- 9 mathematical object to produce the next step in a solution to the problem.
- 1 8. (original) The handheld computing device of Claim 7, wherein said processor
- 2 is further programmed to allow transformations of the mathematical object that
- 3 are valid mathematically but do not lead to the solution of the problem.
- 9. (original) The handheld computing device of Claim 8, wherein said processor
- 2 is further programmed to pause after the user selects the transformation before
- 3 applying the transformation to the problem.

- 1 10. (original) The handheld computing device of Claim 9, wherein said
- 2 processor is further programmed to clean-up the result of a previous
- 3 transformation in response to the user pressing a key, where clean-up consists
- 4 of arithmetic and other basic simplification appropriate for the problem.
- 1 11. (original) The handheld computing device of Claim 7, wherein said
- 2 processor is further programmed to clean-up the result of a previous
- 3 transformation in response to the user pressing a key, where clean-up consists
- 4 of arithmetic and other basic simplification appropriate for the problem.
- 1 12. (original) The handheld computing device of Claim 7, wherein said
- 2 processor is further programmed to provide a set transformation tools for a
- 3 mathematical sub-object that the user can choose from and apply to the
- 4 mathematical sub-object in a selection box to produce the next step in a solution
- 5 to the problem.